

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-7 (Cancelled)

8. (Currently Amended) A database system for storing data including Extensible Markup Language (XML) instances, said database system comprising:

a computer processor; and

a computer readable storage medium having a tangible physical structure, the tangible medium having program code that causes said processor to perform a plurality of operations, said operations comprising:

generating an XML schema ~~collection~~ collections container in a relational database for collecting a plurality of XML schema namespace universal resource identifiers (URIs), each namespace URI respectively identifying a single collection of element types and attribute names in an XML instance that corresponds to a location typed XML schema document, wherein, the XML schema document defines the namespace URIs in the container and a set of attributes, relationships, organizations, and functions for confirming with the XML instance; and each namespace URI in the container allows a reference to any XML schema document in the system;

placing in the created container at least two XML schema namespace universal resource identifiers (URIs) which represent at least two different location typed SQL server namespace schemas in the relational database;

validating a single complex namespace schema for a redefined XML instance by calling an import function specified in the redefined XML instance with at least one of the two location typed schemas that were placed in the container by the respective URIs;

associating a column of a table in another database with the XML schema collections container prior to the validating operation, by setting the location type of the column in the table of the other database in context of the single complex namespace schema for the

redefined XML instance, with any other XML schemas being placed in the container when referencing respective URLs; and

storing the validated single complex name space schema for the redefined XML instance within the column of the container when invoking an alter XML schema collection function specified by the redefined XML instance that adds the validated single complex name space schema for the redefined XML instance into the column of the container in a form of the location typed URI.

9-10. (Cancelled)

11. (Previously Presented) The database system of claim 8, said computer readable storage medium further comprising program code executable by said computer processor that comprises an include function which assembles URIs identified in a plurality of schema location attributes.

12. (Previously Presented) The database system of claim 8, said computer readable storage medium further comprising program code executable by said processor that comprises an alter function which adds schema components to XML schema namespaces within said container.

13-19. (Cancelled)

20. (Currently Amended) A computer processor-implemented method of validating Extensible Markup Language (XML) instances to be stored in a column of a relational database, said method comprising:

creating, via the processor, an XML schema ~~collection~~ collections container in the relational database for collecting a plurality of XML schema namespaces, each XML schema namespace respectively identifying a single collection of element type and attribute names in an XML instance by having a URI (Uniform Resource Identifier) identifying a location typed XML schema document which corresponds to the XML instance, wherein, the XML schema document defines the namespaces URIs in the container and a set of attributes, relationships, organizations, and functions for confirming with the XML instance; and each namespace URI in the container allows a reference to any XML schema document in the relational database;

placing in the created container at least two XML schema namespace URIs which represent at least two different location typed SQL server namespace schemas in the relational database;

redefining a customized XML instance that contains an include function which allows an assembling of XML schema document components to construct a single complex namespace schema for the redefined XML instance;

validating the single complex namespace schema for the redefined XML instance by calling an import function specified in the redefined XML instance with at least one of the two location typed schemas that were placed in the container by the respective URIs;

associating a column of a table in another database with the XML schema ~~collection~~ collections container prior to the validating operation, by setting the location type of the column in the table of the other database in context of the single complex namespace schema for the redefined XML instance, with any other XML schemas being placed in the container when referencing respective URLs; and

storing the validated single complex name space schema for the redefined XML instance within the column of the container when invoking an alter XML schema collection function specified by the redefined XML instance that adds the validated single complex name space schema for the redefined XML instance into the column of the container in a form of the location typed URI.

21. (Cancelled)
22. (Previously Presented) The method of claim 20, further comprising assembling respective namespaces for a plurality of schema location attributes.
23. (Previously Presented) The method of claim 20, further comprising adding schema components to XML schema namespaces within said container for XML schema namespaces.
24. (Cancelled)
25. (Currently Amended) A computer readable storage medium having a tangible physical structure, the tangible medium comprising computer readable modules for interfacing with a storage location for storing XML instances in a computing system, the modules comprising:
- computer readable instructions for:
- generating an XML schema ~~collection~~ collections container in a relational database to collect a plurality of XML schema namespace universal resource identifiers (URIs), each namespace URI respectively identifying a single collection of element types and attribute names in an XML instance which corresponds to a location typed XML schema document; wherein, the XML schema document defines the namespace URIs in the container and a set of attributes, relationships, organizations, and functions for confirming with the XML instance; and each namespace URI in the container allows a reference to any XML schema document in the storage medium;

placing in the created container at least two XML schema namespace universal resource identifiers (URIs) which represent at least two different location typed SQL server namespace schemas in the relational database;

redefining a customized XML instance that contains an include function which allows an assembling of XML schema document components to construct a single complex namespace schema for the redefined XML instance;

validating the single complex namespace schema for the redefined XML instance by calling an import function specified in the redefined XML instance with at least one of the two location typed schemas that were placed in the container by the respective URIs;

associating a column of a table in another database with the XML schema collections container prior to the validating operation, by setting the location type of the column in the table of the other database in context of the single complex namespace schema for the redefined XML instance, with any other existed XML schemas being placed in the container when referencing respective URLs; and

storing the validated single complex name space schema for the redefined XML instance within the column of the container when invoking an alter XML schema collection function specified by the redefined XML instance that adds the validated single complex name space schema for the redefined XML instance into the column of the container in a form of the location typed URI.

26-27. (Cancelled)

28. (Previously Presented) The computer readable storage medium of claim 25, further comprising computer readable instructions that assemble namespaces for a plurality of schema location attributes.

29. (Previously Presented) The computer readable storage medium of claim 25, further comprising computer readable instructions that adds schema components to XML schema namespaces within at least one of said one or more containers for XML schema namespaces.

30-36. (Cancelled)